

- 1. A hybrid optical recording disc having copy protection for use in a computer, comprising:
- (a) a read-only area having preformed information including at least one program and disc identifier data;
 - (b) a recordable area; and
- (c) the disc identifier data being adapted to authenticate a transferred program in the computer to permit the program to be operated by the computer.
- 2. A hybrid optical recording disc with copy protection for use in a computer, the disc having a substrate and a recording layer disposed over the substrate, the substrate having a mastered read-only memory (ROM) area and which includes addressing tracks dedicated to contain disc addressing data which govern read and record processes to and from a computer, and program tracks dedicated to contain computer software programs, and the substrate having a recordable area for recording therein data generated by a computer user and for reading such recorded data from the recordable area to a computer, comprising:
- a) the addressing tracks of the ROM area include at least one disc identifier sub-code track containing disc identifier data embedded therein such that the disc identifier data will authenticate the installed disc addressing data and computer software programs for operation in the computer from the hybrid optical recording disc but will not be transferred, thereby providing protection against copying the disc;
- b) the program tracks of the ROM area include at least one program identifier track containing program identifier data embedded therein which identify the computer software programs; and
- c) the recordable area includes at least one software identifier track containing software identifier data recorded therein of the computer software programs which are included in the program tracks of the ROM area of the hybrid optical recording disc.

- 3. A hybrid optical recording disc with copy protection for use in a computer, the disc having a substrate and a recording layer disposed over the substrate, the substrate having a mastered read-only memory (ROM) area and which is comprised of a lead-in area, a program area, and a lead-out area, and the substrate having a recordable area for recording therein data generated by a computer user and for reading such recorded data from the disc to a computer, comprising:
- a) the lead-in area of the ROM area includes addressing tracks dedicated to disc addressing data which govern read and record processes to and from a computer, at least one of the addressing tracks being a disc identifier subcode track containing disc identifier data embedded therein, such disc identifier data authentication for computer operation but will not be transferred from the computer to thereby provide protection against copying the disc;
- b) the program area of the ROM area contains program tracks dedicated to program data corresponding to computer software programs and such program data will be transferred to a memory device of a computer when installing the hybrid optical recording disc on the computer;
- c) the program area of the ROM area includes at least one program identifier track containing program identifier data embedded therein which identify the computer software programs;
- d) the lead-out area of the ROM area contains data instructing a computer of a termination of the ROM program area and data indicating a start of a new lead-in area associated with a recordable area of the hybrid optical recording disc; and
- e) the recordable area of the disc includes at least one software identifier track in the recordable area, the software identifier track containing software identifier data recorded therein of the computer software programs which are included in the program tracks of the ROM area of the disc, such software identifier data being provided to a computer user, thereby enabling installation of the disc's software program data on a computer.



- 4. The hybrid optical recording disc of claim 3 wherein the recordable area of the hybrid optical recording disc includes a recordable program area for recording therein data generated by a computer user and for reading such recorded data from the recordable program area to the computer.
- 5. A method of providing a hybrid optical recording disc with copy protection for use in a computer, comprising the steps of:
- a) mastering a read-only memory (ROM) area and a recordable area on a disc substrate so that the ROM area includes addressing tracks and program tracks, the addressing tracks including at least one disc identifier sub-code track for embedding therein authenticating disc identifier data which will not be transferred from the computer when installing the disc in the computer, thereby providing protection against copying the disc, the program tracks of the ROM area including at least one program identifier track containing program identifier data embedded therein which identify computer software programs contained in the ROM program tracks;
- b) coating an optical recording layer over the mastered disc substrate; and
- c) recording in a designated software identifier track of the recordable area a software identifier, the software identifier recording step being implemented in correspondence with the software programs included in the program tracks of the disc's ROM area, the software identifier also being provided to a computer user and corresponding to a hybrid optical recording disc having selected software program titles contained in the program tracks of the ROM area.
- 6. The hybrid optical recording disc of claim 2 wherein the disc identifier data are embedded in a disc identifier sub-code track within a leadin area of the ROM area.
- 7. The hybrid optical recording disc of claim 3 wherein the disc identifier data are embedded in a disc identifier sub-code track within a power calibration area (PCA).

8. The hybrid optical recording disc of claim 3 wherein the disc identifier data are embedded in a disc identifier sub-code track within a program memory area (PMA).

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